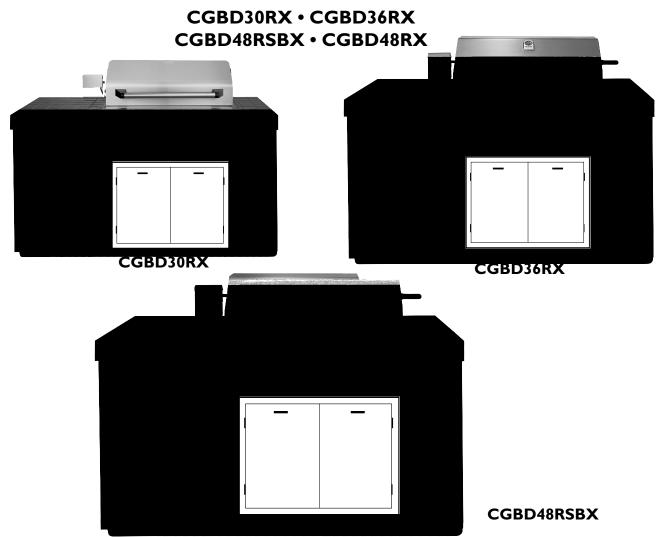
# **Thermador**® Installation Instructions

Thermador Char Glo® Outdoor Barbecues

Models:



**Installer:** Please leave these instructions with the unit for the owner.

**Owner:** Please retain these instructions for future reference.



**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.



**AVERTISSEMENT:** Si l'information dans ce manuel n'est pas suivie exactement, une incendie ou une explosion peut résulter, entrainant des dégats matériels, des blessures ou la mort.

# Inside Front Cover – Blank

### **Contents**

| SEC | CTION I: Safety Information   | 2                |
|-----|---|------------------|
|     | Natural Gas Requirements Propane Gas Requirements Gas Consumption Propane Hook-up | 3<br>3<br>3      |
|     | Built-In Installations  | 5                |
|     | ETION 4: Electrical Cautions  Electrical Requirements  Grounding Instructions     | 7                |
|     | CTION 5: Unpacking, Moving and Placing the Unit                                   | 8<br>0<br>I      |
|     | CTION 6: Test and Adjustment  | 2<br>2<br>2<br>2 |

#### SECTION I: SAFETY INFORMATION

#### FOR YOUR SAFETY

If you smell gas:

- I. Shut off gas to the appliance.
- 2 Extinguish any open flame.
- 3. Open lid.
- 4. If odor continues, immediately call your gas supplier or your fire department.

#### FOR YOUR SAFETY

- I. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- 2 An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

#### **AVERTISSEMENT**

S'il y a une odeur de gaz:

- I. Coupez l'admission de gaz de l'appariel.
- 2 Enteindre toute flamme nue.
- 3. Ouvrir le couvercle.
- 4. Si l'odeur peraiste, appeler immediatement votre compagnie de gaz ou votre departement des incendies.

#### **AVERTISSEMENT**

- Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de l'appareil, ni de tout autre appareil.
- 2 Une bouteille de propane qui n'est pas raccordée en vue de son utilisation, ne doit pas etre entreposée dans le voisinage de cet appareil ou de tout autre appareil.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

TESTED IN ACCORDANCE WITH ANSI Z21.58 – 1995, ANSI Z21.58a – 1998 STANDARD FOR OUTDOOR COOKING GAS APPLIANCES, AND CAN/CGA 1.6 – M95, CGA 1.6a – M98, STANDARD FOR OUTDOOR COOKING GAS APPLIANCES.

This unit is for outdoor use only in a well-ventilated area. Not to be used in a building, garage or any other enclosed area.

Check your local building codes for the proper method of installation. In the absence of local codes this unit should be installed in accordance with the National Fuel Gas Code No. Z223.I Current Issue and National Electrical Code ANSI/NFPA No. 70 Current Issue or the CAN/CGA – B149.I Natural Gas Installation Code or CAN/CGA - B149.2 Propane Installation Code and C22.I Canadian Electrical Code Part I.

#### **SECTION 2: GAS REQUIREMENTS**

#### **NATURAL GAS REQUIREMENTS -**

**Inlet Connection:** 1/2" NP with 3/8" NPT reducer adapter.

**Supply Pressure:** 6" to 14" W.C.

Manifold Pressure: 5" W.C.

#### **PROPANE GAS REQUIREMENTS -**

**Inlet Connection:** 1/2" NP with 3/8" NPT reducer adapter.

Supply Pressure: | | " to | 4" W.C.

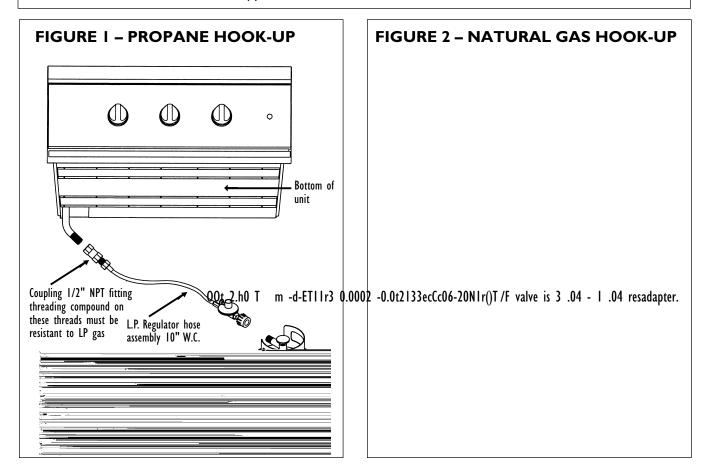
Manifold Pressure: 10" W.C.



**IMPORTANT:** A manual gas shut off valve must be installed external to the appliance, in a location accessible with the unit installed in the enclosure. Make sure the valve is turned off prior to connecting the appliance.



**IMPORTANT:** Un robinet manuel d'isolement doit être installé à l'extérieur de l'appareil, dans un emplacement accessible avec l'unité installée dans la module. Assurez-vous que le robinet est fermé avant de brancher l'appareil.



#### **SECTION 2: GAS REQUIREMENTS**

#### For Massachusetts Installations:

- 1. Shut-off valve must be a "T" handle gas cock.
- 2. Flexible gas connector must not be longer than 36 inches.
- 3. Not approved for installation in a bedroom or a bathroom unless unit is direct vent.

#### **CAUTION:**

The appliance must be isolated from the gas supply system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2" psig (3.5kPa).

When checking the manifold gas pressure, the inlet pressure to the appliance regulator should be at least 7.0" W.C. for natural gas, and 11.0" W.C. for propane.

Do not attempt any adjustment of the pressure regulator.

#### **ATTENTION:**

L'appareil doit étre isolé du circuit d'alimentation de gaz en fermant son roblnet manuel d'isolement individuel pendant toutes essais sous pression du circuit de tuyauterie d'alimentation de gaz aux pressions d'essai égales à ou moins de 3.5kPa (1/2 psig).

En controlant la pression de gaz du tubulure, la pression de prise au régulateur de l'appareil devrait être au moins I I.2mm HG pour gaz naturel, et 20.5mm HG pour gaz de propane.

N'essayez aucun réglage du régulateur de pression.

#### **CAUTION:**

When connecting to propane gas supply, make certain that the propane gas tank is equipped with its own high pressure regulator in addition to the pressure regulator supplied with the appliance. The pressure of the gas at the appliance regulator must not exceed 14" water column.

#### **ATTENTION:**

En se reliant a l'approvisionnement de gaz de propane, assurez-vous que le réservoir de gaz de propane est équipé de son Propre régulateur à haute pression en peus du régulateur de Pression fourni avec l'appareil. La pression du gaz au régulateur de l'appareil ne doit pas exéceder 26.1 mm HG.

#### **SECTION 3: SITE PREPARATION**

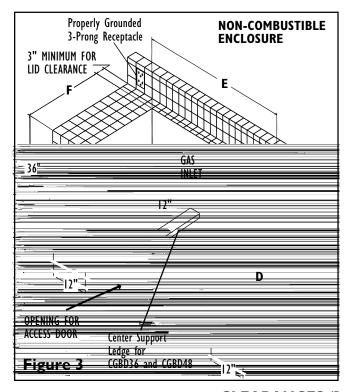
#### **BUILT-IN INSTALLATIONS**

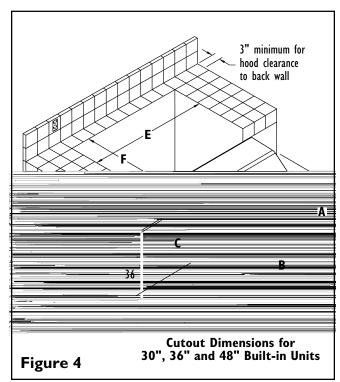
Determine a suitable location for the barbecue by taking into account exposure to wind and availability of gas and electrical supplies. Exposure to wind should be minimized, as wind can adversely affect cooking performance. Insure that the gas supply line and electrical supply are located in close proximity to the unit to keep connections to the unit as short as possible and allow for installation and removal of the unit from the enclosure. Allow adequate area around the unit for dissipation of smoke produced during cooking.

#### CABINET PREPARATION

The models CGBD30, CGBD36 and CGBD48 are designed for easy installation into masonry enclosures. For noncombustible applications, the barbecue drops into the opening shown in Figures 3 and Fig. 4, (below). A ledge is required to support the barbecue from the bottom. Models CGBD36 and CGBD48 also require a ledge in the center of the opening to support the middle of the unit. The supporting ledges must be level and flat. The counter top should also be level.

It is recommended that ventilation holes are provided in the enclosure in the event of a gas leak. The installer-supplied gas shut-off valve must be installed in an easily accessible location.





**CLEARANCES** (Refer to Figures 3 and 4)

| CharGlo® Outdoor Barbecues |        |                    |        |                                 |                             |        |  |  |  |
|----------------------------|--------|--------------------|--------|---------------------------------|-----------------------------|--------|--|--|--|
| Model No.                  | Overal | Overall Dimensions |        |                                 | Cutout Dimensions           |        |  |  |  |
|                            | Α      | В                  | С      | D                               | E                           | F      |  |  |  |
| CGBD30RX                   | 24-3/4 | 30-7/16            | 26-5/8 | - <sup>15</sup> / <sub>16</sub> | 29-3/4                      | 22-3/4 |  |  |  |
| CGBD36RX                   | 24-3/4 | 36                 | 26-5/8 | - 15/16                         | 35-5/16                     | 22-3/4 |  |  |  |
| CGBD48RSBX                 | 24-3/4 | 48                 | 26-5/8 | - 15/16                         | <b>47-</b> <sup>5</sup> /16 | 22-3/4 |  |  |  |
| CGBD48RX                   | 24-3/4 | 48                 | 26-5/8 | -15/16                          | <b>47-</b> <sup>5</sup> /16 | 22-3/4 |  |  |  |

**Note:** All height width and depth dimensions are shown in inches.

All Char-Glo® Outdoor Barbecues are CGA and AGA approved.

#### **SECTION 3: SITE PREPARATION**

#### To combustible construction -

Below the cooking surface, combustible construction can be placed directly adjacent to the unit. Allow 8" clearance at the lower left rear of the unit for adequate routing of the gas and electrical supply line.

Minimum horizontal clearance from sides and back of unit to adjacent vertical combustible construction extending above top of unit, 12" from sides and 20" from back.

Degagement horizontal minimal a respecter entre les cotes et l'arriere de l'appareil et une construction combustible verticale adjacent depassant la partie superieure de l'appareil, soit 12" (305mm) pounces des cotes et 20" (508mm) ponces de l'arriere.

#### To non-combustible construction -

Above the cooking surface, a minimum 8" clearance from the sides is required to allow use of the rotisserie motor and skewer. A minimum of 3" clearance from the rear is required to allow proper opening of the hood.

Below the cooking surface, non-combustible construction can be placed directly adjacent to the unit. Clearance of 8" at the lower left rear of the unit must be maintained to allow adequate routing of the gas and electrical supply lines.

# SECTION 4: ELECTRICAL REQUIREMENTS AND GROUNDING INSTRUCTIONS



#### **CAUTION**



**CAUTION** 

Installation of electrical supply circuit should be done by a qualified electrician in accordance with local codes and ordinances. In the absence of local codes or ordinances, the supply should be installed in accordance with the National Electric Code ANSI/NFPA No. 70, current issue, or Canadian Electric Code C22.1 Part 1.

The Thermador® Char Glo® barbecues use an electronic ignition system that requires a 120 VAC, 15A, 60 Hz power supply. A properly grounded duplex outlet must be provided adjacent to the lower left rear corner of the unit. See Figure 5A (below).

A properly grounded duplex outlet made for outdoor applications should also be provided above the level of the cooking surface on the left side of the unit. This outlet is required for connection of the rotisserie motor. See Figure 3 (Page 5).

#### **WARNING**

**Electrical Grounding Instructions** 

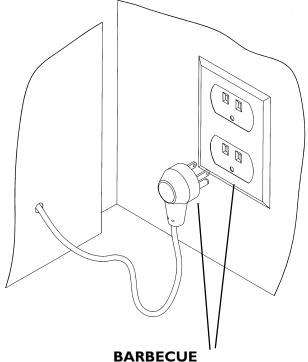
This outdoor cooking gas appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

#### **AVERTISSEMENT**

Instruction pour la mise a la terre electrique

Cet appareil est muni d'une fiche a trots broches (mise a la terre) afin de vous proteger des chocs et doit etre branche dire~ement dans une prise de courant a trots broches adequatement mise a la tem. Il ne faut pas couper ou enlever la broche de mise a la tem de cette fiche.

Figure 5A



Three-Prong Plug and Receptacle

# SECTION 5: UNPACKING, MOVING AND PLACING THE UNIT LOCATING YOUR CHAR GLO® BARBECUE

Leaving the unit on the pallet, move the unit close to the final installation site. Unpack and remove all accessory items, packing materials and product literature from inside the unit. Verify the gas supply type. If the unit is not compatible with the gas supply, it will be necessary to convert it for use with the supply. See conversion instructions below.

#### CONVERSION KIT BY MODEL

| Model No.  | Orifice Description               | Part Number  | Quantity | Remarks             |
|------------|-----------------------------------|--------------|----------|---------------------|
| CGBD30RX   | #54 Orifice Hood, Grill Burner    | 08-04-082-05 | 2        | To Convert LP to NO |
|            | #59 Orifice Hood, Infrared Burner | 08-04-082-02 | I        |                     |
|            | Conversion Sticker                | 20-09-337    | I        |                     |
| CGBD36RX   | #54 Orifice Hood, Grill Burner    | 08-04-082-05 | 3        | To Convert NG to Li |
|            | #59 Orifice Hood, Infrared Burner | 08-04-082-02 | I        |                     |
|            | #73 Orifice, Smoker Burner        | 08-04-066-04 | I        |                     |
|            | Conversion Sticker                | 20-09-337    | I        |                     |
| CGBD48RSBX | #54 Orifice Hood, Grill Burner    | 08-04-082-05 | 3        | To Convert NG to L  |
|            | #59 Orifice Hood, Infrared Burner | 08-04-082-02 | I        |                     |
|            | #73 Orifice, Smoker Burner        | 08-04-066-04 | I        |                     |
|            | #56 Orifice ,Side Burner          | 15-10-186    | 2        |                     |
|            | Conversion Sticker                | 20-09-337    | I        |                     |
| CGBD48RX   | #54 Orifice Hood, Grill Burner    | 08-04-082-05 | 4        | To Convert NG to LI |
|            | #59 Orifice Hood, Infrared Burner | 08-04-082-02 | 2        |                     |
|            | #73 Orifice, Smoker Burner        | 08-04-066-04 | I        |                     |
|            | Conversion Sticker                | 20-09-337    | I        |                     |

Socket Driver-1/4" Drive, 3" minimum extension Phillip Screwdriver 3/16" Or 7 mm Socket or Wrench Slotted Screwdriver 1/2" Deep Well Socket Masking Tape 1/2" Open Wrench

#### Natural Gas to Liquid Propane Conversion

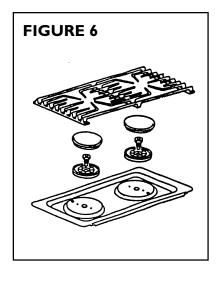
All Models are manufactured at the factory for use with natural gas, and as such require conversion for use with an LP gas supply. The conversion should be done by a qualified technician or your gas supplier. All orifices required for conversion are provided with the units. The following steps are necessary to convert for LP operation -

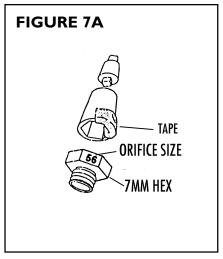
- Make sure that the unit is disconnected from the gas and electrical supplies.
- Remove the grill grates and radiants. Unbolt the main burners from their attachment at the rear of the burner box and remove.
- 3. Remove the knobs and control panel from the unit.
- 4. Locate the main burner orifices. From inside control panel area, locate the brass elbows that the orifices are attached to. Use a wrench on the flats of these elbows to keep them from turning during orifice removal and installation. Remove the main burner orifices and replace with the LP orifices supplied (marked 54). Do not overtighten orifices. Orifice must extend a minimum of 1/8" into main burner air shutter with burner installed. Make sure burner will not disengage from orifice.

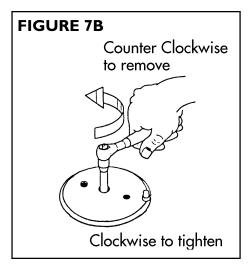
- 5. From behind the unit, remove the louvered cover on the infrared rotis burner housing.
- 6. Locate the infrared burner orifice and remove. Replace with the LP orifice supplied (marked 59).
- 7. Locate the smoker burner. Slide the orifice out of the burner and remove. Replace with the LP orifice supplied (marked 73). Reinstall the orifice into the burner.
- On Model CGBD48RSBX, convert the side burners for LP operation as follows:
  - A. Remove the grate, burner caps, venturis and burner bases. See Fig. 6.
  - B. Remove the burner orifices. Use a 7mm hex socket on a 3" ratchet extension and apply a piece of tape to the socket to hold the orifice in the socket while removing. See Fig. 7A.
  - C. Replace with the LP orifices supplied (number 115). Tighten until snug. See Fig 7B.
  - D. Reassemble the burner bases and venturis. Reinstall burner caps and grate.

**NOTE:** Install the conversion sticker (supplied) beside the rating label.

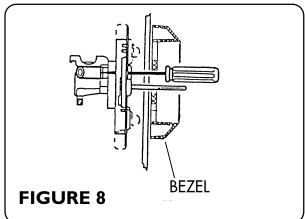
#### **SECTION 5: UNPACKING, MOVING AND PLACING THE UNIT**



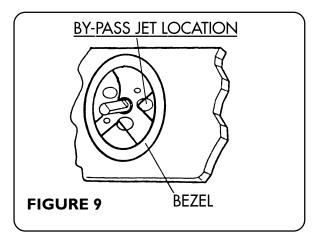




9. On all models, the bypass jet must be turned clockwise with a small flat-bladed screwdriver until fully seated to set proper low flow rate. See Figures 8 and 9.

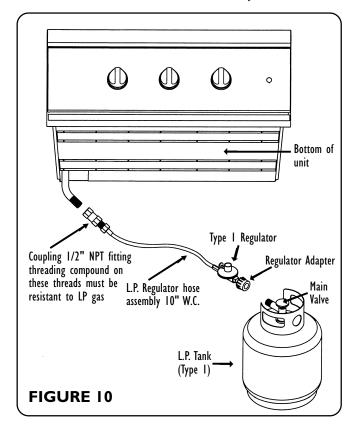


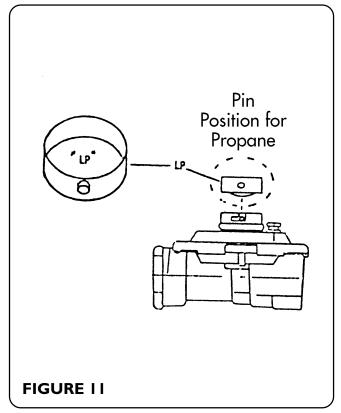
10. All barbecue models are supplied with a pressure regulator that is packed with the unit. The regulator is set for natural gas. For use with propane, it must be converted. The regulator will be located on the left rear bottom of the unit. Using a flat blade



screwdriver, remove the cap on the top of the regulator and turn the cap over so that the letters LP are exposed. Make sure the spring in the regulator remains in position. Re-attach the cap to the regulator. See Figures 10 and 11, below.

#### **SECTION 5: UNPACKING, MOVING AND PLACING THE UNIT**





- II. If the barbecue will be used with an LP cylinder, follow these steps:
  - C. The proper LP hose and regulator assembly must be used. The Model LPHOSE is available at your Thermador dealer. This assembly can also be purchased locally providing it meets the following specifications:

Hose length to be 24".

Regulator must be a high pressure, high volume unit capable of supplying adequate gas flow based on the input rating of the unit (refer to Gas Consumption in Section 2).

The inlet connector on the LP regulator must be compatible with the LP cylinder valve.

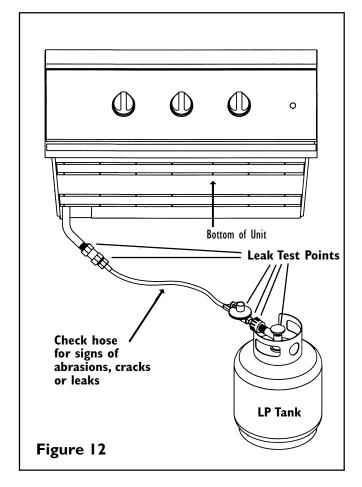
The hose and regulator assembly must be AGA certified for use with LP gas in an outdoor application.

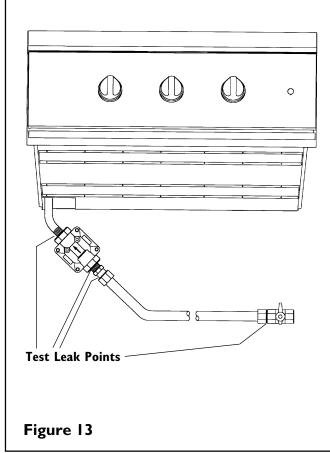
B. Install supplied I/2" NPT coupling on the end of the manifold located at the left rear bottom of the cooktop. See Fig. I. Use a pipe sealant approved for use with LP gases on all threads.

- C. Attach gas hose/regulator assembly to the coupling as shown in Fig. 1.
- D. Connect the gas regulator assembly to the LP tank valve.
- E. Attach gas regulator label (included with LP orifices) to the gas regulator.
- 12. Turn on the gas supply but do not attempt to light any burner. Check the unit for leaks per the instructions in Section 6 (Page 12).
- 13. Reinstall control panel and knobs. Reinstall the rear cover on the infrared burner housing. Reinstall main burners, making sure to install and tighten the nuts that retain the burners at the rear of the burner box. Connect the unit to the electrical supply. Light all burners one by one and verify proper operation on high and low control settings. See Section 6 (Page 12).
- 14. Reinstall radiants and grill grates.

#### **GAS AND ELECTRICAL HOOK-UP**

With the unit inside of the enclosure, connect the gas supply hose to the manual shut-off valve and open valve. Check the connection points at the shut-off valve for any leaks and repair prior to installation of the unit. Connect the power supply cord to the electrical supply outlet.





#### **SECTION 6:TEST AND ADJUSTMENT**

#### CHECKING FOR LEAKS

All points of connection to the gas supply should be checked for leaks at time of installation or anytime you smell gas. It is also advisable to recheck them periodically. Follow the steps outlined below:

- A. Make a soap solution of one part liquid detergent and one part water.
- B. Make sure all controls are in the "OFF" position. Turn on the gas supply to the unit. Use a spray bottle, brush or rag to apply the solution to all fittings and points of connection from the supply stub out up to and including the inlet to the

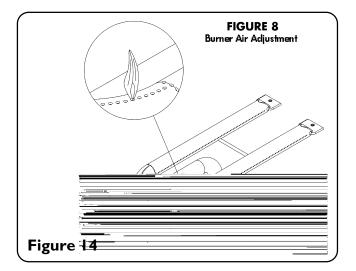
- manifold. Bubbles will form where a leak exists.
- C. If a leak is present, shut off the gas at the supply. Tighten any leaking fittings, turn on the gas and recheck.
- D. If the unit has been converted for use with an alternate gas, make sure the technician checks for leaks at all points of connection in the control panel area and at the infrared burner prior to reassembly of the control panel and cover (Refer to NG to LP Conversion, instructions in Section 5).

#### **BURNER AIR ADJUSTMENT**

All burners are adjusted for proper flame characteristics at time of assembly. If the unit has been converted for use with alternate gas supply, some adjustment of the air shutter on the main burner may be necessary. Refer to Figure 14. If adjustment is required, loosen the screw on the air shutter and close or open shutter as required to achieve proper flame characteristics. Tighten the screw after adjustment.

All burners should exhibit flames which are blue and stable, with no yellow-tipping, lifting or excessive noise when operating on either natural or LP gases. See Figure 8 for pictorial representation of proper flame characteristics.

The infrared rotis burner, smoker burner and surface burners on model CGBD48RSBX are not adjustable.



If any of the flame characteristics noted above are observed, check the burner for dirt or residue in the ports, spider webs, etc., and clean or repair as necessary.

#### ✓ INSTALLER CHECKLIST ✓

#### INSTALLATION

- Placement of unit.
- Specified clearances maintained to combustible or noncombustible surfaces as applicable.

#### **GAS SUPPLY**

- Appliance is connected to the proper type of gas supply.
- Manual gas shut off valve is installed in an accessible location (with unit installed in enclosure for builtin installations).
- Unit tested and free from gas leaks.
- Gas supply pressure does not exceed I4" W.C.

#### **ELECTRICAL**

- Properly grounded receptacle is present for unit and rotisserie motor as necessary.
- The burner box area is free of any packing materials and that the burners, radiants and grates are properly located and installed.
- Burner caps properly positioned and seated on burner bases (Model CGBD48RSBX only).
- If the unit is to be used with propane gas, verify that the LP gas supply has its own high pressure regulator in addition to the pressure regulator supplied with the appliance.

## Inside Back Cover – Blank

Specifications are for planning purposes only. Refer to installation instructions and consult your countertop supplier prior to making counter opening. Consult with a heating and ventilating engineer for your specific ventilation requirements. For the most detailed information, refer to installation instructions accompanying product or write Thermador indicating the model number.

Thermador reserves the right to change specifications or design without notice. Some models are certified for use in Canada. Thermador is not responsible for products which are transported from the United States for use in Canada. Check with your local Canadian distributor or dealer. Thermador, 5551 McFadden Avenue, Huntington Beach, CA 92649.

For the most up to date critical installation dimensions by fax, use your fax handset and call 702/833-3600. Use code #8030.





